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BRIAN TUNG RE 348Claims:

1. A video processing system comprising:

a video coder, the video coder including the capability to generate an edge detection map

along a predetermined direction for an uncoded frame that is to be coded.

2. The video processing system of claim 1, wherein the video coder includes the capability to also compress the edge detection map.

3. The video processing system of claim 1, wherein the predetermined direction comprises one of the vertical and horizontal direction.

4. The video processing system of claim 1, and further comprising a video decoder.

5. The video processing system of claim 4, wherein the video decoder includes an edge-sensitive post-filter, the edge-sensitive post-filter including the capability to enhance a decoded video frame based, at least in part, on a decoded edge detection map associated with the decoded frame.

6. A video processing system comprising:

a video frame processor to generate an edge detection map from an uncoded video frame to be coded, the video frame processor further including the capability to code the edge detection map.

7. The video processing system of claim 6, wherein the video processing system includes the capability to code the edge detection map for transmission via a communications channel along with an associated coded video frame.
8. The video processing system of claim 6, wherein the video processing system includes the capability to code the edge detection map for transmission via a communications channel separately from an associated coded video frame.
9. The video processing system of claim 6, wherein the video processing system includes the capability to code the edge detection map for storage along with an associated coded video frame.
10. The video processing system of claim 6, wherein the video processing system includes the capability to code the edge detection map for storage separately from an associated coded video frame.
11. A method of processing a video frame comprising:
- producing an edge detection map along a predetermined direction from the video frame prior to coding;
  - coding the edge detection map and the video frame.
12. The method of claim 11, wherein the predetermined direction comprises one of a horizontal direction and a vertical direction.

13. The method of claim 11, wherein producing an edge detection map includes producing more than one edge detection map along more than one direction; and
- wherein coding includes coding the more than one edge detection map.
14. The method of claim 13, and further comprising:
- decoding the coded edge detection maps and video frame.
15. The method of claim 14, wherein decoding includes applying an edge-sensitive post-filter, the edge-sensitive post-filter including the capability to enhance a decoded video frame based, at least in part, on decoded edge detection maps associated with the decoded frame.
16. The method of claim 11, and further comprising:
- decoding the coded edge detection map and video frame.
17. The method of claim 16, wherein decoding includes applying an edge-sensitive post-filter, the edge-sensitive post-filter including the capability to enhance a decoded video frame based, at least in part, on a decoded edge detection map associated with the decoded frame.
18. The method of claim 17, and further comprising: storing the coded video image and edged detection map before decoding.
19. The method of claim 17, and further comprising: transmitting the coded video image and edge detection map via a bandwidth limited communications channel prior to decoding.

20. An article comprising: a storage medium having stored thereon instructions capable of being executed by a system that when executed result in:
- producing an edge detection map along a predetermined direction from the video frame prior to coding;
  - coding the edge detection map and the video frame.
21. The article of claim 20, wherein the predetermined direction comprises one of a horizontal direction and a vertical direction.
22. The article of claim 20, wherein producing an edge detection map includes producing more than one edge detection map along more than one direction; and
- wherein coding includes coding the more than one edge detection map.
23. The article of claim 22, and further comprising:
- decoding the coded edge detection maps and video frame.
24. The article of claim 23, wherein decoding includes applying an edge-sensitive post-filter, the edge-sensitive post-filter including the capability to enhance a decoded video frame based, at least in part, on decoded edge detection maps associated with the decoded frame.
25. The method of claim 23, wherein decoding includes applying an edge-sensitive post-filter, the edge-sensitive post-filter including the capability to enhance a decoded video frame based, at

least in part, on decoded edge detection maps associated with the decoded frame.

26. The method of claim 20, and further comprising:

decoding the coded edge detection map and video frame.

27. The method of claim 26, wherein decoding includes applying an edge-sensitive post-filter, the edge-sensitive post-filter including the capability to enhance a decoded video frame based, at least in part, on a decoded edge detection map associated with the decoded frame.

28. The method of claim 27, and further comprising: storing the coded video image and edged detection map before decoding.

29. The method of claim 27, and further comprising: transmitting the coded video image and edge detection map via a bandwidth limited communications channel prior to decoding.

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